

A Ploughing Engine and Barn.

This story begins during 1971 at Manor Farm, Old Knebworth, Hertfordshire.

It involved the sole surviving John Allen ploughing engine no. 67 moving a large and very old wooden barn a distance of about two thirds of a mile across Knebworth Estate to a new location. This event will be well known to older members I am sure, perhaps some were there at the time?

However I would like to add some further details to the story regarding the move.

In 1971 I was 21 years old living close to Old Knebworth.

We used to rent a lock-up garage at Manor Farm so I was frequently there working on my car. (As an aside, a retired motor mechanic who also had a garage at the farm jokingly said to me one day, "do you know that you can drive your car on the road and that it does not have to be in pieces all the time!!").

One day I noticed that Bailey bridge parts had been placed on the ground around the old barn, but the reason was not immediately obvious. My father had been a member of the Royal Engineers during WW2 and I had seen photographs of him working on Bailey bridges so I knew what they were.

At first I thought these Bailey panels were going to be used to repair the barn, where perhaps the lower sections had rotted and weakened the structure. The next time I went to the farm I noticed that the barn had had some of the lower outside boards removed all the way round and had been raised slightly by hydraulic jacks. The Bailey panels were supporting the sides and ends of the barn. It was now quite clear that the barn was going to be moved, although I could barely believe it. A company called Pynford had attached their name board to the barn with the slogan 'Pynfords move buildings'.

Later still I noticed that large steel framed wheels with wooden treads were on site. My memory is not clear about who actually made them but the local blacksmith/farrier certainly did some welding on the project. His name was Ron Stimpson and his blacksmiths shop was on the same farm site. At this time he was still shoeing horses at the farm.

It is difficult to accurately recall the sizes of the wheels now but I think they must have been four to five feet in diameter and probably three feet wide.



As time went by the barn was jacked higher and higher until the wheels could be moved under the barn and secured to a frame of large steel 'I' section joists which were fixed under the Bailey sections. There was also a scaffolding support framework inside the barn.

To prevent tiles from falling from the roof during the move a wooden plank ledge was built beneath each of the sloping sides of the roof. It was said that not a single tile was lost during the move.

Originally there were sixteen wheels supporting the barn, eight at the front, and eight at the rear. The front wheels were divided into two sets of four and each set could be swivelled about their mid points independently. On both front and rear wheel sets each set had two wheels inside and under the barn and two were outside. This arrangement was later modified slightly.

The barn was standing amongst some trees so those in its path had to be removed. Having felled and removed the trees there were, of course, the stumps to contend with.

Some of the stumps were removed by using the winch of an ex-Army Diamond 'T' recovery tractor and possibly a bulldozer. The Diamond 'T' was owned at that time by Robert Dixon Ltd who I think were based in Ware, Hertfordshire. However some stumps were not going to yield to the Diamond 'T' and had to be helped out with explosives. On one occasion when the explosive detonated it sent a piece of root high into the air and smashed the rear window of a nearly new Range Rover in the farmyard!

I do remember three bulldozers/crawlers, connected together by chains and wire ropes, being attached to the barn. Whether or not this was a first attempt to try to move the barn or for some other purpose I

don't know. This was before the ploughing engine arrived on site. The exact types of bulldozers/crawlers used I can't remember, but one certainly bore the name Drott.

At Easter 1971, an attempt was made to move the barn. Once again I was on site working on my car, a 1959 Morris Minor, replacing the big end bearings this time!!

The barn needed to be pulled slightly forward and then through almost a right angle to begin its journey to the new site.



The ploughing engine was owned at this time by the late Sir William McAlpine. The engine drivers name was Charlie Pollard.

I believe a tree was used to anchor a pulley block between the plougher and the barn.

When the barn had not moved more than a few yards there was a problem. One of the front wheels dug into the comparatively soft ground, probably where some of the trees had been removed. This had the effect of slewing this set of wheels round and twisting one of the "I" section joists at the front of the barn. These joists were ten, possibly twelve inches in section. This one had been twisted by about 30 degrees along its length. It is hard to believe this until the weight and stresses involved are taken into account.

I have heard that the barn weighed about 80 tons and the total weight was 100 tons.

There was now some delay while repairs were carried out. I believe it was at this stage that a change was made to the front wheel steering arrangement. Four heavy commercial vehicle wheels were added in front of each set of the original front wheels on outriggers. I think this probably improved the weight distribution and prevented further twisting of the front wheel frames.

Time moved on and the next time I visited the site the barn had been turned and had just left the farmyard boundary. I did not witness that part of the operation. The barn was now being made ready for the straight pull on the next part of its journey across the adjoining field. I remember clearly standing near the rear end of the barn and watching the plougher steadily pulling the barn across the field. The smoothness of the barns travel being particularly noticeable.

After travelling in stages, several hundred yards, the barn had to be turned by 90 degrees at least once and possibly twice more to get it into its final position over the next few weeks.

Today this barn and another which was moved in pieces from another farm on the estate form the catering facilities at Knebworth House.

The whole farm site where the barn had stood has now been redeveloped into housing.

I believe a house has been moved in Kent at some time by similar methods but I have no details of this.

The three photographs were taken by my cousin, Richard Albon, during the move.

Brian Albon 20th May 2021.



The engine is that used: The Allen ploughing engine rebuild owned then by Bill McAlpine.

The barn move is featured in the "Ploughing by Steam" film featured in the club's "Archive Films" DVD. See Sales Page.